



NEAR Fly-By

The Near Earth Asteroid Rendezvous (NEAR), the first asteroid orbiter of the Space Age, is scheduled to fly by the large Main Belt asteroid 253 Mathilde on Friday, June 27. NEAR is making a 35-month journey to Eros, the smallest solar system body to be orbited by a spacecraft. The mission seeks to answer important questions about solar system genesis and evolution.



Mission to Mars

The landing process for Mars Pathfinder will begin days before its scheduled arrival on the red planet on Friday, July 4. The process begins when JPL controllers send commands to the spacecraft to tell it when to begin the complex series of steps necessary to safely land on the surface of Mars. These commands are sent periodically, up to a few hours before landing. It is then that controllers on the Earth will have the most precise knowledge of where the spacecraft is relative to Mars (the effect of Mars' gravity well is not felt until the spacecraft is fewer than 48 hours away).

Spaceport News

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John F. Kennedy Space Center

Shuttle, payload teams complete timely turnaround

by Joel Wells

NASA's Space Shuttle and payload teams are creating a number of first-time and record-breaking events in processing the orbiter Columbia for its scheduled launch Tuesday, July 1, at 2:37 p.m. from Launch Pad 39A. It will be the first reflight of the same payload and crew in Space Shuttle history.

Columbia, which saw an abbreviated mission due to indications of a faulty fuel cell, remains on track for its relaunch of the Microgravity Science Laboratory mission.

Columbia launched on April 4 and landed on April 8 without completing the mission's science objectives. About two weeks later, Shuttle program managers decided to reflly the Microgravity Science Laboratory mission on STS-94

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COLUMBIA waits on Pad 39A for its launch as part of mission STS-94, scheduled for liftoff at 2:37 p.m. on July 1. Along with the same payload, the STS-83 crew members will all fly again on STS-94 — a NASA first. Payload and processing teams made orbiter turnaround history as well.

Shriver joins Morgan and Jennings to complete Bridges' top management team at Kennedy

Center Director Roy D. Bridges, Jr. has announced the appointment of Loren Shriver as deputy director for Launch and Payload Processing effective July 6, after the launch of STS-94. Shriver has been serving as manager of Launch Integration for the Space Shuttle Program. In the interim period, he will begin assuming duties of his new position while assuring a smooth transition of his previous duties to his successor in the Space Shuttle Program.

At the same time, Bridges appointed James Jennings as



Shriver



Morgan



Jennings

deputy director for Business Operations and JoAnn Morgan as associate director for Advanced Development and Shuttle Upgrades.

Together, they will assist the center director in strategic planning and work in partnership with directors of line organizations on customer requirements and mission

execution.

"With the addition of Loren Shriver to our existing senior staff, I think we have assembled an outstanding management team," Bridges says. "Their challenge will be to meet the needs of the agency during the coming

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Shuttle . . .

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as soon as possible within safety guidelines.

"This decision demonstrated the Shuttle program's confidence in the KSC processing team," says Bob Sieck, director of Shuttle Processing. "Special credit goes to workers in Orbiter Processing Facility Bay 1, who produced a quality product in record time."

NASA's Shuttle and payload communities teamed up to give Columbia and the Spacelab payload a speedy turnaround. Once in the OPF, replacement of the problem fuel cell was completed the week after landing.

The ambitious schedule required that all experiment reservicing occur while the Spacelab remained in the Shuttle's payload bay. Payload technicians overcame the cramped conditions and successfully completed many critical tasks, such as replenishing the flammable fluids of a combustion experiment.

"This is the first time that a payload has remained in an orbiter between flights," says KSC Payload Manager Scott Higginbotham.

Normally, an orbiter stays in the OPF for about 85 days to prepare for its next launch, but this reflight called for about 56 days. Managers saved some time by deferring

certain routine structural inspections until Columbia's next mission, but other work could

not wait and had to be accomplished before launch.

For example, the Shuttle's forward reaction control system, located in the nose of the vehicle, had to be removed with three out of 16 steering thrusters requiring replacement. Also, two of the three 85-pound auxiliary power

units that provide hydraulic power to Columbia's flight control systems were replaced, having reached their run-time limit between overhauls.

"Most of the time-savings in the OPF was the result of a concerted planning effort between NASA and our contractor partners," says Grant Cates, NASA flow director for Columbia.

To further speed up Columbia's processing for reflight, managers took one main engine scheduled to fly on Atlantis in September and two engines from Columbia's November flight.

The external fuel tank and solid rocket boosters being used on STS-94 were originally slated for Mission STS-85, set to fly in August.



MEMBERS of the STS-94 processing team celebrated their achievement with a June 6 post-rollover party at Shuttles restaurant on State Road 3. STS-94 Commander Jim Halsell (right) showed his appreciation for their hard work by handing out mission patches to United Space Alliance employees Don Smith (sitting), Steve LaBelle, and other attendees. A host of NASA senior managers also were on hand to thank the team for their dedication, including Shuttle Processing Director Bob Sieck, Launch Director Jim Harrington, Columbia Flow Director Grant Cates, and Vehicle Manager Kelvin Manning, as well as USA Shuttle Ground Operations Manager Mike McCulley.

Bridges. . .

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years of processing and launching the International Space Station while preparing KSC to help attain the next goals when humankind will learn to work and explore beyond low earth orbit."

Shriver will provide executive leadership, strategic planning and direction for responsibilities of KSC as the Center of Excellence for Launch and Payload Processing Systems, including payload carriers, Shuttle processing and launch, and processing of payloads including International Space Station elements, as well as responsibilities assigned to KSC for expendable launch vehicles (ELVs).

He has served as Launch Integration manager since May 1993, responsible for final Shuttle preparation, mission execution, and return of the orbiter to KSC following landings at Edwards Air Force Base, Calif.

A graduate of the Air Force Academy, he participated in development test and evaluation of the F-15 fighter aircraft and the T-38 lead-in fighter.

Selected by NASA as an

astronaut candidate in Jan. 1978, Shriver has flown three Shuttle missions — as pilot of STS-51C and as commander of STS-31 and STS-46.

"Our first priority is to continue to serve our current customers in the Space Shuttle and Space Station programs," says Shriver, "but along with that, we will be developing centers of excellence in payload, launch, and ELV processing to be able to support any potential customer in the future."

Jennings will be responsible for direction of KSC institutional services and staff functions including Financial Management, Procurement, Administration and Human Resources, Legal Services, Information Management, and Equal Opportunity. He has served as acting deputy center director since Jan. 9, 1997, and as director of the Administration Office since May 1993. In the latter position, he was responsible for industrial labor relations, strategic planning, civil service personnel management and workforce analysis, continual improvement, university liaison, and information management. Previously,

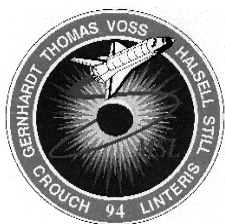
Jennings served as deputy comptroller responsible for the KSC budget process.

"This new management structure will allow us as a diverse and yet unified center to better focus on issues important to future center programs, its people, and its business operations as a whole," says Jennings.

Morgan will provide leadership for KSC activities on Shuttle flight systems upgrades and for creating a customer-driven environment and new opportunities for the KSC team to participate in cutting edge technology development and application.

She has served as associate director of Safety and Shuttle Upgrades since Sept. 1, 1996, responsible for improvements to meet Shuttle flight safety and operational requirements into the 21st century.

"I am proud of all of the contributions that our people in operations and programs have made to date," says Morgan, "and I have a lot of hopes and aspirations that we will be able to apply that knowledge and expertise to developing new business and making contributions toward future space programs."



First tenant graduates from Florida/NASA Business Incubation Center

A small business entrepreneur who developed an innovative software package for manufacturing companies has become the first graduate of the Florida/NASA Business Incubation Center (FNBIC).

The Windows-based software package is modular in design and "handles inventory from womb to tomb," noted developer Vasu Vasudevan during a graduation ceremony June 6 at the Incubation Center, located on the Brevard Community College (BCC) campus in north Titusville. It is managed through a joint partnership of BCC, the Technological Research and Development Authority (TRDA), and KSC. The event, held during Small Business Week, also recognized volunteers who have helped FNBIC tenants as well as BCC Small Business Development Center clients turn their entrepreneurial ideas into reality. In the first four months since the center's creation in August 1996, volunteers logged nearly 500 hours of free support time.

JoAnn Morgan, just appointed as KSC's associate director for Advanced Development and Shuttle Upgrades, was the keynote speaker. She pointed out that new jobs in the United States are created mostly by small businesses and commended Vasudevan for his vision.

Vasudevan joined the

FNBIC in July 1996. His company, Infotech Systems, can handle almost any computing requirement, from installation and maintenance of local area networks (LANs) to creating and hosting pages on the World Wide Web. The manufacturing control software which he designed and developed, using the resources offered by the FNBIC, addresses every management requirement a made-to-order manufacturing company might have. There is an order processing software module, an engineering module, a shop floor control module, even a maintenance module and a module for quality assurance.

The FNBIC's mission is to increase the number of successful technology-based small companies originating in, developing in, or relocating to Brevard County. At present, the 10,000-square-foot facility houses seven tenants, said Executive Director Maria Clark. Tenant services include furnished office space, the services of a receptionist, conference rooms, computer access and networking opportunities.

An additional 11 clients are located off-site, with Vasudevan about to join their ranks. Off-site clients pay an annual membership fee, which allows them use of the center's shared common areas such as conference rooms and audiovisual equipment, as well as being entitled to attend seminars and workshops sponsored by the FNBIC.

And while Vasudevan already had one prospective client lined up prior to his graduation, the ceremony itself paid dividends. Two attendees were so impressed by his demonstration of the manufacturing control software package that they may become customers as well.



INCUBATION CENTER graduate Vasu Vasudevan shows KSC Associate Director for Advanced Development and Shuttle Upgrades JoAnn Morgan the software package he developed. The Windows-based modular software allows a manufacturing company to manage electronically all aspects of product development, from the sales lead phase to final delivery.

KSC workers can use Incubation Center

Editor's Note: KSC employees interested in starting a technology-related business are invited to call the center at 383-5200.

The Incubation Center's Web address is:
<http://technology.ksc.nasa.gov/FNBIC>

NASA employees taking a phased or trial retirement can work at the center as advisors to tenants or provide general support to center staff. Contact Sharon Lowry, employee relations specialist, at 867-2514.

Savings Bond Success

This year's U.S. Savings Bond Fund Drive produced outstanding results by KSC civil service employees. Out of 1,918 staff members, 1,376 participate in the payroll savings plan (up from 1,225 at the beginning of the campaign). In addition to the 151 new participants, 92 staffers increased their existing allotment.



June employees of the month



HONORED in June: Seated in front are (from left) Mario Bassignani (Shuttle Processing), Cassandra Black (Administration), and Becky Riorden (Logistics Operations). Standing are (from left) Linda Burse (Installation Operations), Scott Higginbotham (Payload Processing), Al Parrish (Space Station Hardware Integration Office), and James Davis (Office of Chief Financial Officer). Not shown are Helen Kane (Safety and Shuttle Upgrades), Eric Schafer (Engineering Development), Jim Medina (Safety and Mission Assurance), Dr. George Martin (Biomedical Operations), and Dan Lewis (Procurement).

NKMA installs officers for '97-'98

The NASA Kennedy Space Center Management Association (NKMA) installed new officers and presented annual awards and scholarships at a ceremony June 6 in the Space Station Processing Facility cafeteria. Board Member Mike DelVesco conducted the installation of Miguel Rodriguez, Payload Processing, as president; Vanessa Stromer, Shuttle Processing, as vice president; Barbara

Powell, Procurement Office, as secretary; and Kathy Bryant, Office of Chief Financial Officer, as treasurer. Installed as new board members to serve two-year terms were Ann Montgomery, Logistics Operations, and Catherine Alexander, Installation Operations.

"NKMA will continue to be a very active organization in the coming year," Rodriguez said. "We have established six goals, one of which is to assist the center director and center management in communicating NASA and KSC goals to employees through speakers, programs, and networking teams."

Three special awards open to all KSC employees were presented.

- **The Education Outreach Award** is for promoting engineering and space science. **Steven Schindler** of Shuttle Processing, a Science Club volunteer and science fair judge, won it for organizing the Ask An Engineer project. He also assembled computers donated by NASA to Fairglens Elementary School, constructed Fairglens' home page on the World Wide Web, and served on the School Improvement Committee for two years. **Dawn Elliott** of Safety and Mission Assurance won the award for participating in the KSC Science, Engineering and



BOARD MEMBER Mike DelVesco, far left, installs new officers and board members at the June 6 meeting. They are, from left, new board members Ann Montgomery and Catherine Alexander (outgoing president), Vice President Vanessa Stromer, President Miguel Rodriguez, and Secretary Barbara Powell. Not shown is Treasurer Kathy Bryant.

Taking Our Sons to Work Day



YOUNG Doyle Frisbee, son of EG&G Florida employee Lynna Frisbee, ponders the prospect of piloting a helicopter during Sons Day activities June 5. Doyle was one of many youngsters who visited KSC with a parent or sponsor, learning about the many varied career opportunities available in the space program.

Research Career Help (SEARCH) Crew Program and the Southeastern Consortium for Minorities in Engineering (SECME) program, tutoring students at Endeavour Elementary School, and serving as an Olympiad instructor and judge and a mentor in a summer scholars program.

- **The Community Service Award** is for contributions to the community. **Doug Hendriksen** of the Office of Chief Counsel has been involved for several years with KSC's ongoing computer system donation program to area schools, and he established a surplus software loan program to Florida schools.

- **The Leadership Award** is for the successful completion of a task or project within budget and schedule using innovative management techniques. **Chuck Davis** of Logistics Operations was cited for his outstanding leadership

in the gaseous nitrogen pipeline upgrades project completed this year.

- **Outstanding Leadership Awards** were given to Sterling Walker, Dave Flowers, Max Farley, Cheryl Hurst, Christina Brown, Richard Schneider, Gale Allen, Jean Rhodes, Bob Geron and Dian Hardison.

- **Certificates of Appreciation** were presented to Miguel Rodriguez, Irene Long, Larry Ellis, Jim Jennings, Tom Breakfield, Vanessa Stromer, Kathy Bryant, Dan Diolosa, Bob Mott, June Perez, Bennie Bell, Cindy Jarvis, Susan Wall, Connie Dobrin, Scott Colloredo, Lisa Colloredo, Bill Jones, Kristine Kennedy, Susan Kroskey, Maria Lopez-Tellado, Tom Clarke, Pam Steel, Jeanne O'Bryan, Shawn Quinn, Mike DelVesco, Barb Powell, Karen Iftikhar, the Payload Processing Directorate, and Catherine Alexander.

June is Seat Belt Awareness Month



JUNE is Seat Belt Awareness Month at KSC. Shown giving a "thumbs up" to safety with KSC Director Roy Bridges are Transportation Dept. crash test dummies Vince and Larry (really Safety and Mission Assurance Directorate staff). At KSC, seat belt use is up approximately four percent from 1995. In Florida and on all government sites, wearing seat belts is the law.



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